

# RGB 109xi

Dedicated VGA-QXGA Interface with Audio & ADSP™



## FEATURES

- Input: RGB video on attached 4' (1.2 m) male 15-pin HD cable with 3.5 mm stereo audio plug and cable
- Output: RGB video on female BNC connectors for RGsB, RGsB, or RGBHV; audio on captive screw connector
- Compatible with VGA-QXGA, Mac G3, and Mac G4 display signals
- 300 MHz (-3 dB) RGB video bandwidth
- ADSP™ - Advanced Digital Sync Processing
- Active PC audio to balanced audio interfacing
- Three-position level/peaking switch
- Horizontal centering control
- DDSP™ - Digital Display Sync Processing
- Automatic sync stripping from red, green, and blue
- Buffered female 15-pin HD local monitor output
- Rugged metal enclosure
- Internal international power supply

## DESCRIPTION

The Extron **RGB 109xi** with ADSP™ is a dedicated computer-video interface with a 15-130 kHz scanning range, 300 MHz (-3 dB) of RGB video bandwidth, and a 15-pin HD connector. It is compatible with VGA-QXGA, Mac G3, and Mac G4 display signals, and will convert computer-generated, unbalanced audio to balanced, line level audio. Sync processing is achieved through Extron's exclusive ADSP - Advanced Digital Sync Processing technology, ensuring compatibility with digital display devices such as DLP, LCD, D-ILA™/LCoS, plasma, etc.

## SYNC

Input type	RGBHV TTL (±), RGsB TTL (±), RGsB 0.3V (-), RsGsBs 1.3V (-)
Output type	RGBHV (±), RGsB(±), RGsB (-)
Input level	2.0 V to 5.5 Vp-p with ±0.2 VDC offset (max.)
Output level	4.0 V to 5.0 Vp-p, unterminated
Input impedance	10k ohms
Output impedance	75 ohms
Max. propagation delay	48 ns
Max. Rise / Fall time	3.5 ns
Polarity	RGBHV: when RGBHV is input, polarity follows input; otherwise negative RGsB, RGsB: negative

## AUDIO

Gain	Unbalanced output: 0 dB; balanced output: +6 dB
Frequency response	20 Hz to 20 kHz, ±0.05 dB
THD + Noise	0.03% @ 1 kHz, 0.3% @ 20 kHz at nominal level
S/N	>90 dB at maximum output (14 dBu), balanced (unweighted)
Stereo channel separation	>95 dB @ 1 kHz to 20 kHz

## AUDIO INPUT

Number / Signal type	1 PC level stereo, unbalanced
Connectors	(1) 3.5 mm stereo plug, 24" cable from computer video connector; tip (L), ring (R), sleeve (ground)
Impedance	>10k ohms, unbalanced, DC coupled
Nominal level	-10 dBV (316 mVrms)
Maximum level	+8.5 dBu, (unbalanced) at 1% THD+N

## AUDIO OUTPUT

Number / Signal type	1 stereo (2 channel), balanced/unbalanced
Connector	(1) 3.5 mm captive screw connector, 5 pole
Impedance	50 ohms unbalanced, 100 ohms balanced
Gain error	±0.1 dB channel to channel
Maximum level (600 ohm)	> +14 dBm, balanced at 1% THD+N

## GENERAL

Power	100 VAC to 240 VAC, 50/60 Hz, 15 watts, internal, autoswitchable
Rack mount	No
Furniture mount	Yes, with optional kits #70-077-01 (under-desk) & #70-077-02 (through-desk)
Enclosure type	Metal
Enclosure dimensions	1.75" H x 6.4" W x 6.0" D 4.4 cm H x 16.3 cm W x 15.2 cm D (Depth excludes connectors.)
Product / Shipping weight	1.8 lbs (0.8 kg) / 4 lbs (1.8 kg)

## SPECIFICATIONS

### VIDEO

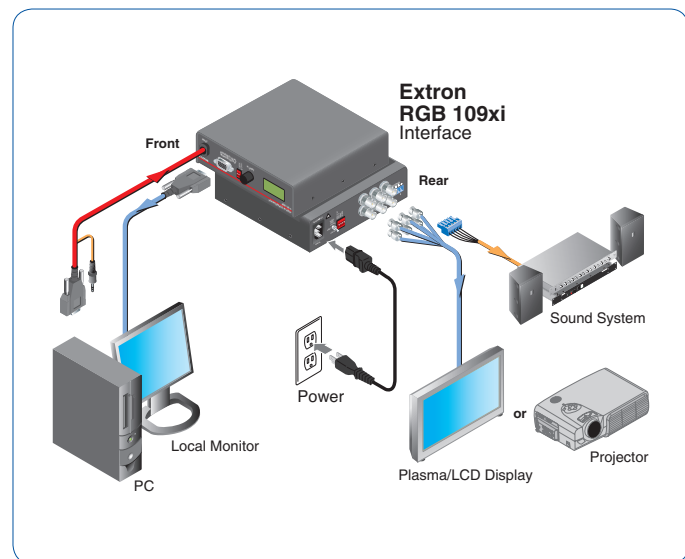
Gain	Unity (0.7 V), (0.725 Vp-p) 50% peaking, (0.75 Vp-p) 100% peaking
Bandwidth	300 MHz (-3 dB)

### VIDEO INPUT

Number / Signal type	1 analog RGBHV, RGsB, RGsB, RsGsBs
Connectors	1 male 15-pin HD, 48" (1.2 m) long cable
Nominal level	0.7 Vp-p for RGB
Minimum / Maximum levels	Analog: 0.3 V to 1.5 Vp-p with no offset at unity gain
Impedance	75 ohms
Horizontal frequency	Autoscan 15 kHz to 130 kHz
Vertical frequency	Autoscan 30 Hz to 120 Hz
Return loss	<-30 dB @ 5 MHz
DC offset (max. allowable)	4.0 V

### VIDEO OUTPUT

Number / Signal type	1 analog RGBHV, RGsB, RGsB
Connectors	6 BNC female, 1 female 15-pin HD local monitor output (buffered)
Nominal level	0.7 Vp-p for RGB
Minimum / Maximum levels	Analog: 0.7 V to 0.75 Vp-p with 0.70 Vp-p input
Impedance	75 ohms
Return loss	-30 dB @ 5 MHz



## MODEL

RGB 109xi

## VERSION DESCRIPTION

Dedicated Interface with ADSP™

## PART #

60-289-01

## OPTIONAL ACCESSORIES

MBD 129

## MODEL DESCRIPTION

1U, 1/2 & 1/4 Rack Width Through-Desk Mount Kit for Two-Piece Enclosure... page 757

## PAGE

## PART #

70-077-02